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**Achieving Economic  
Benefits at Local Events:  
a case study of a local sports event**

by

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## **Achieving Economic Benefits at Local Events: a case study of a local sports event**

### **Introduction**

Special events or hallmark events are generally thought of as huge 'mega' events. The Olympic Games, World fairs, historic milestones and other similar events fit neatly into Ritchie's definition of hallmark events as :

"one-time or recurring events of limited duration, developed primarily to enhance the awareness, appeal and profitability of a tourism destination in the short and/or long term" (Ritchie, 1984:2).

These large international special events have tended to attract huge marketing fees, dominate media time and are obvious tourism research opportunities. By contrast, local sports carnivals, cultural festivals and community fairs generally attract no marketing fees and have a low media profile. Nevertheless these local fairs and carnivals can be special events :

"in relation to their regional and local significance"  
(Hall, 1989:264).

What is important is the examination of the impacts of an event for which the resources required can be met out of 'slack' within the destination (i.e. it is

generally within the destination's existing tourist carrying capacity) rather than requiring the addition of specific and perhaps temporary resources.

This study was designed to investigate the economic benefit of a small special event which operated within the existing resource capacity of a local economy. It will be shown that opportunity costs were low and community benefit is likely to be enhanced from other sources in addition to direct tourist expenditure. The event was the NCUSA Games held at Southern Cross University, Lismore, July 2-6, 1995. The local community was the Lismore City Council area (LCC), comprising about 40,000 people, living on the Far North Coast of New South Wales, Australia (North Coast Population and Development Monitor, 1992).

### **Resources in Local Regions for Special Events**

Governments at all levels, have increasingly turned to special events to promote tourism. Regional tourism agencies generally include events, attractions and exhibitions as a large part of their tourism development strategy (Getz, 1989). Marketing of the event is expected to bring social, physical and economic benefits to the host community or nation. The anticipation of tourists and increased expenditure in the destination area is a common feature of any special event (Murphy and Carmichael, 1991). There is an expectation that visitor spending will contribute significantly to the local economy. These strategies can be unrealistic with benefits over-estimated unless the region has a combination of factors conducive to tourism growth

and development. Heavy emphasis on this strategy could lead to events and attractions becoming an everyday occurrence, competing with one another, which would seem to be self defeating (Craik, 1991). Conducive regional factors would include a clean environment, adequate facilities and infrastructure, a genuine range of events and attractions, friendly host population and local government receptive to the wishes of the host population and more.

Many local communities promote sport, recreation and tourism opportunities to make full use of their recreational facilities and to expand and diversify their local economy. Local groups recognise that the economic value of events needs to be recorded in order to make effective decisions (Yoshioka, Virden and Knopf, 1991).

Getz (1992) points out that special events induce many of the same economic impacts on destinations as other forms of tourism do, yet there are also substantial differences, especially in resource implications. Where the resources used are inelastic in supply (there are capacity constraints), businesses in tourism attempt to manage general demand by tourists to ensure that capacity is used as efficiently as possible (Bull, 1991: 94-95). These demand management techniques are normally used to counteract seasonal or cyclical demand (Lovelock, 1992) and avoid resource slack or increased opportunity costs. However, these methods are not available for managing the impacts of special event tourism, unless the event itself is a demand

management measure. Many events - especially larger 'hallmark' events - require the construction of special infrastructure, additions to the stock of tourism support facilities and the diversion of resources from other activities, all of which bear an opportunity cost.

It is suggested that as well as increasing the level of utilisation of existing resources such as accommodation, events may, where resources are poor, act as a stimulus to build new facilities (Mazitelli, 1989). However, this clearly incurs opportunity costs on destinations. For example, (Hall, 1992) summarises a number of events which have generated large costs of this kind, including in particular:

- indirect or hidden costs (such as indirect subsidies for infrastructure) (Hall, 1992: 57)
- the 'displacement effect' where visitors and locals go elsewhere to avoid inflated prices, crowds and the perception of full accommodation (Hall, 1992: 58-59).

The efficient long-term utilisation of assets generated for use at an event is also a major issue. Roberts and McLeod (1989: 242) note: "The common legacy of many past events has been a huge debt and a great deal of under-utilised infrastructure."

There is clearly therefore, a distinction between large or hallmark events which induce an accelerator effect on capital investment and engender high potential opportunity costs, and smaller local events which generate a marginal level of tourist activity which can be met from existing resources. Tourism always has a higher marginal value when it takes place in areas which have underused tourism facilities, underemployment and relatively low incomes and prices (Bull, 1995). This enables the more efficient use of established facilities, together with off-season travel and accommodation at cheaper prices for consumers (Hall, 1992: 59).

### **Local Region Special Event Costs**

Special events can generate substantial economic costs, often forgotten in the euphoria surrounding the event (Crompton, 1995). These can include direct, indirect and opportunity costs. The direct costs associated with staging a local special event are similar in nature to mega events, only smaller in size. These may include garbage removal, police duty, traffic control, medical assistance, security and other costs.

Indirect costs associated with the local events can be difficult to record but must be taken into account for a balanced economic investigation. These include personal or property damage related to drug or alcohol use at the event or post-event, social disturbances from over enthusiastic team supporters, congestion, disruption to lifestyle of local people and vandalism.

## **Local Region Special Event Benefits**

The direct and indirect benefits of a local special event are again similar in nature to a mega event only smaller in magnitude. They can include increases in employment, income, output, investment, extra services, infrastructure and improvements. Intangible benefits such as growth in community spirit and co-operation can result from the host community being vitally involved in event planning and production. Where the event enhances the values of the local residents as well as providing economic stimulus, the hosts can be expected to support the event (Getz, 1991). Many local special events would not be viable without the assistance of volunteers in planning, organising, marketing and production. These activities can create significant, long lasting contributions to the development of the local community (Williams, Dossa and Tompkins, 1995). The NCUSA Games in Lismore generated much community support and goodwill through the assistance of volunteers before, during and after the event. Local media reports acknowledged that the NCUSA Games event "had an entire town behind it" (Northern Star, July 3, 1995:3). Local events must not only provide economic stimulus, but also impact socially on the host community in a positive way.

The impact of volunteer labour is a good example of added economic value attributable to a local event. Hall (1992) notes the importance of local volunteer contributions to events, where such voluntary labour in the community would not be offered without the event as a catalyst. Volunteers provide free labour in such areas as hosting visitors, maintaining facilities, event administration, and safety and security (Williams, Hainsworth and Dossa, 1995). If it is assumed (fairly) that voluntary labour is provided from leisure time, then the opportunity cost of the labour value provided is minimal, and the community gains a net benefit. However, large hallmark events are less likely to attract volunteer labour, where potential workers might reasonably expect to earn commercial wages for their labour. This is an opportunity cost-bearing resource shift for a local economy.

### **Estimating Economic Impacts at Local Special Events**

There are two broad approaches used in estimating economic impacts for special events. These are structured computer modelling and managerial accounting (Uysal and Gitelson, 1994). The computer model generally involves input-output or general equilibrium models, which, whilst suitable for regional or national level modelling, require data that is frequently unavailable at the local level. The managerial accounting approach involves estimating visitor expenditure and developing an understanding of where the expenditures occurred. The managerial accounting approach was adopted

here, similar to that used by Long and Perdue (1990) in their study on local special events.

Ritchie (1984) suggested using two principal sources of data to consistently and simultaneously provide a wide, verifiable data base for economic impact estimates. These are direct and indirect measures. Direct measures are those where information is obtained from participants at events. Indirect information is that obtained from organisations affected by the event (Uysal and Gitelson, 1994). In this study, information was gathered using both direct and indirect measures in order to obtain reliable and valid data.

According to Burns and Mules (1986), the geographical frame of reference of an event is an important factor to consider when assessing costs and benefits. They suggest that the smaller the region the greater the range of those attending can be classified as outside visitors. Therefore, visitor expenditure can be seen as an injection of funds from outside the area. In addition, there is greater potential for leakages of funds associated with imported goods and services at events held in smaller regions. In the case of the 1995 NCUSA Games, the indirect round of spending is difficult to estimate. Funds paid to businesses outside the region are expected to be substantial due to the nature of purchased goods, such as alcohol brought from capital city breweries. Lismore, a smaller regional centre, does in fact rely heavily on goods and services 'imported' from capital cities and major centres.

Capital spending required to stage an event is another important factor to consider in assessing the economic impact of special events. McCann and Thompson (1992) maintain that events which have low staging costs and little or no capital expenditure have a greater potential to impact positively on regional economies.

### **1995 NCUSA GAMES RESEARCH METHODS**

The objectives of the present study were to identify and evaluate the major direct and indirect economic benefits and costs that the NCUSA Games brought to, and imposed upon, the LCC area.

The study assumed that being a reasonably homogeneous student group, there would be no significant different variations in the ages and spending patterns of the visitors. It was also assumed that income obtained from the spending of 250 local participants was regarded as "Switched Income" and for the purpose of this study was ignored. This recognised the fact that the money spent by local participants may have been spent on other items in Lismore, during this time, if not at the games. No allowance was made for retained local spending, thus making this study conservative.

The terminology used in this study is defined in Appendix A.

## **Data Collection**

Primary data was derived from interviews, collected and mailed diaries.

Diaries : A random sample was drawn from every fourth person queued at the accreditation desks. Demographics were collected and a total of 250 diaries distributed. These were divided into two equal groups, called mail-back and collect-back. Thus, 125 participants were advised that their diaries were to be collected on the last day of the Games, at a particular point and the other 125 were advised that their diaries were to be returned by mail. On the last day of the NCUSA Games, 32 diaries were collected. Later, 51 mail return diaries were received.

Interviews : 150 interviews (81 group and 69 single) were carried out on the last day. These random interviews were conducted at the point of entry for each of the 13 sports venues used. Filter questions were included to avoid double counting. Each researcher conducted 15 interviews with every 4th. person entering the grounds from 8am to 2pm.

Data on the total income and expenses on sale of goods from sports association canteens, Union shop and clubhouse, local government costs, information on sponsors and social nights were obtained from interviews with the NCUSA organising committee and local businesses.

Secondary data was derived from media reports, financial and work records and the NCUSA final report.

### **Response Rates**

Two separate methods, interviews and diaries, were used to collect the required data. The response rate for the combined recall interviews was 150 (100%) compared with the combined diary records of 83 (32.5%). Of the 125 diaries to be collected on the last day of the Games, only 32 were ready for collection, achieving a 29% response rate. Of the 125 diaries distributed for mail back, 51 were returned giving a response rate of 33%.

It is recognised that the response rate for diary returns was low, but it is within the modal response rate for mail surveys (Green, Tull and Albaum, 1988). In all, 48 diaries were returned in the first wave. Follow up mailing only managed to increase responses by 3, making a total of 51 diaries returned. Logistical constraints prevented further follow ups. Whilst steps were taken (see below) to check for demographic consistency between respondents and non-respondents, it should be noted that actual expenditure by non-respondents may have differed from that reported by respondents, a finding often found in literature. Given this fact, this study might best serve as a pilot project.

As Faulkner and Raybould (1995) noted, response bias may occur due to attrition with the diary technique. This can be tested by comparing the demographic profiles of those first approached with those who returned diaries. There was no statistically significant difference between the means or proportions of demographic data between those who were approached and those who returned diaries.

There was one exception, accommodation, where the results may overemphasise those staying in University accommodation at the expense of those staying in hotels and motels. Of the diaries issued, 48% were given to those staying in University units and 57% of these were returned. By contrast, 36% of diaries issued were given to those staying in local hotels and motels but only 25% were returned. Thus bias (if any) will be towards those staying in University accommodation and away from those staying in hotels and motels, but expenditure between those two groups shows no significant difference in any category. No other evidence of response bias was found.

### **Treatment of the Data**

Primary visitor expenditure was calculated by taking the average survey expenditure and multiplying it by the number of visiting participants. There were approximately 250 local and 1350 non-local participants or visitors. Event income was categorised into local and non-local. When the source of funds was non-local, this was treated as 'new' income which may not have

come to the local area except for the NCUSA Games. Event expenses were also categorised into local and non-local, depending on the suppliers location. Where a non-local business or supplier was paid for services to the event, this payment actually 'leaked' out of the local area and was lost for further investment. Thus, the equation used was:

Visitor expenditure + non-local event income - non-local payments = net direct income for the LCC area.

## FINDINGS

### Demographics

Demographic data was obtained from survey participants for both the diary and recall methods.

| <b>Table 1</b>  |               |                                |                  |
|---|---------------|--------------------------------|------------------|
| <b>Demographics by Gender, Age, Place of Residence, Accommodation Used and Type of Involvement.</b> |               |                                |                  |
| <b>Demographic</b>  |               | <b>Frequency<br/>400 total</b> | <b>Percent %</b> |
| <b>Gender</b>   | Female        | 186                            | 46.5             |
|   | Male          | 214                            | 53.5             |
| <b>Age Group</b>  | 15 - 20 years | 250                            | 62.5             |
|   | 21 - 30 years | 130                            | 32.5             |
|   | Over 30 years | 20                             | 5.00             |
| <b>Place of Residence</b>   | Northern NSW  | 43                             | 10.8             |
|   | Northern QLD  | 42                             | 10.5             |
|   | Southeast QLD | 257                            | 66.8             |
|   | Other         | 48                             | 12               |
| <b>Accommodation</b>  | Caravan       | 24                             | 6.0              |

|                            |                                      |     |      |
|----------------------------|--------------------------------------|-----|------|
|                            | Hotel                                | 143 | 35.8 |
|                            | Rented Unit                          | 12  | 3.0  |
|                            | University                           | 170 | 42.5 |
|                            | VFR (Visiting friends and relatives) | 36  | 9.0  |
|                            | Other                                | 15  | 3.8  |
| <b>Type of Involvement</b> | Competitors                          | 351 | 87.8 |
|                            | Supporter                            | 28  | 7.0  |
|                            | Official                             | 21  | 5.3  |

Table 1 provides a demographic profile of the survey participants. Of the 400 respondents 46.5% were female and 53.5% male. As could be expected with a university based sports event, the majority of respondents were under 21 years, with a total of 380 under 30 years of age. The mean age was 21.32. In addition, 87.8% of respondents were participants of the Games. The mean number of nights spent in Lismore City Council area was 4.13.

Respondents were also asked whether they would have come to Lismore this year or within the next 12 months, if not for the NCUSA Games. 63 % of respondents said they would not have come, if not for the Games. This was important for this study as the additional expenditure generated by these visitors to Lismore would not have normally occurred.

### **Visitor Expenditure**

The NCUSA Games were held over 4 days. The per day expenditure was calculated by dividing total mean expenditure of respondents by 4. (The mode length of stay was four days.)



| <b>Table 2</b>   |                             |                                    |                               |                             |                              |
|--|-----------------------------|------------------------------------|-------------------------------|-----------------------------|------------------------------|
| <b>Mean Visitor Expenditure by Total, Per Day, Competitor, Official and Supporter.</b> |                             |                                    |                               |                             |                              |
| <b>Expenditure Item</b>  | <b>Total Exp<br/>\$Mean</b> | <b>Per Day<br/>Exp<br/>\$ Mean</b> | <b>Competitor<br/>\$ Mean</b> | <b>Official<br/>\$ Mean</b> | <b>Supporter<br/>\$ Mean</b> |
| <b>Accommodation</b>   | 82.29                       | 20.57                              | 85.24                         | 111.56                      | 27.50                        |
| <b>Entertainment</b>   | 9.99                        | 2.49                               | 9.29                          | 16.83                       | 10.60                        |
| <b>Food &amp; Beverage</b>   | 113.89                      | 28.47                              | 117.45                        | 110.44                      | 82.65                        |
| <b>Souvenirs</b>   | 13.02                       | 3.25                               | 11.60                         | 29.17                       | 12.10                        |
| <b>Local Transport</b>   | 13.86                       | 3.46                               | 10.29                         | 49.39                       | 16.30                        |
| <b>Total</b>   | 233.05                      | 58.24                              | 231.83                        | 317.39                      | 149.15                       |

Respondents were asked to estimate their expenditure on accommodation, entertainment, food & beverage, souvenirs/shopping and local transport. The average spending was \$233.05 with almost half being spent on food and beverages. Further analysis indicated there was a significant difference, (largely attributable to reported food/beverage spending), between the mean total expenditure by males (\$256) and that of females (\$207) ( $t = 3.07$   $p = .002$ ).

A comparison between competitors, officials and supporters revealed that officials significantly outspent competitors and supporters in all categories except food and beverage. Some of their food/beverage was complimentary, which would explain the change of pattern.

Previous Australian research on average spending at other special events is shown in Table 3 below.

| <u>Events</u>              | <u>City</u> | <u>Year</u> | <u>Source</u>               | <u>Food &amp; Bev.<br/>Exp. per day</u> |
|----------------------------|-------------|-------------|-----------------------------|---|
| Under 19 National Softball | Hobart      | 1988        | Sports Economics, 1992      | \$54.00 (inc. accommodation)            |
| Canon World Triathlon      | Gold Coast  | 1991        | QLD Events Corp.,1991       | \$28.00                                 |
| Australian Grand Prix      | Adelaide    | 1992        | Price Waterhouse, 1993      | \$33.00                                 |
| Third Aust. Masters Games  | Brisbane    | 1991        | QLD Events Corp.,1991       | \$40.00                                 |
| Aust. University Games     | Brisbane    | 1993        | Faulkner and Raybould, 1995 | \$26.14                                 |

Comparisons on average spending at special events are difficult to make due to the varied nature and size of each event. The range of average spending seems closely associated to the size, location and demographic profiles of participants and visitors. Mules and McDonald (1994) suggest that visitors to sports events spend less than a typical tourist. This is especially the case when a typical sports enthusiast is not likely to be staying in a five star hotel and not attending a mega event where peak demand often generates increased prices. The average spending on food and beverage of \$28.47 at the NCUSA Games, Lismore was at the lower end of other recorded event expenditure. However, given the regional location and limited income of most young university students, this result seems reasonable.



**Comparison of Mean Expenditure Per Day between 1993 Australian University Game, Brisbane and 1995 NCUSA Games, Lismore.**

The 1993 Australian University Games held in Brisbane at University of QLD was planned as the largest University sporting event in Australia, attracting approximately 5067 competitors, (Faulkner and Raybould, 1995). A visitor survey conducted during the games gathered direct expenditure data. The expenditure categories for the Lismore study were based on those used in the Brisbane study. A direct comparison between the two is provided in Table 4.

| <b>Table 4<br/>Comparison of Mean Spending between 1993 Australian University Games, Brisbane and 1995 NCUSA Games, Lismore.</b> |                            |                             |                          |
|--|----------------------------|-----------------------------|--------------------------|
| <b>Expenditure Item</b>  | <b>Lismore<br/>\$ Mean</b> | <b>Brisbane<br/>\$ Mean</b> | <b>Difference<br/>\$</b> |
| <b>Accommodation</b>   | 20.57                      | 23.25                       | 2.68                     |
| <b>Entertainment</b>   | 2.49                       | 7.71                        | 5.22                     |
| <b>Food &amp; Beverage</b>   | 28.47                      | 26.14                       | 2.33                     |
| <b>Souvenirs/shop</b>  | 3.25                       | 7.82                        | 4.57                     |
| <b>Local Transport</b>   | 3.46                       | 5.8                         | 2.34                     |
| <b>Total</b>   | 58.24                      | 70.86                       | 12.62                    |

As shown in Table 4, the range of spending at both events is fairly consistent, with the largest difference in dollar amounts between the two events being spent on entertainment and souvenir/shopping. Respondents from the Brisbane study spent twice as much on these items as their counterparts in Lismore. The difference in these two categories may be explained by the fact that Brisbane has more to offer with entertainment and shopping than

Lismore, a smaller regional centre. Interestingly, there was only minimal difference between the amounts spent on food/beverage, accommodation and local transport, at both event locations. In both cases the highest amounts were spent on food/beverage.

### **Primary Visitor Expenditure**

Based upon the number of visitors to the NCUSA Games, the duration of the Games (4 days) and the expenditure estimates from the visitors' surveys, an estimate has been prepared of the total expenditure directly generated by visitors to the 1995 NCUSA Games. Figures provided by the NCUSA Games committee indicate there were approximately 250 local and 1350 non local participants. For the purpose of this study only non local participants were surveyed.

| <b>Table 5</b>  |                  |                |
|---|------------------|----------------|
| <b>Primary Visitor Expenditure Total and Per Day.</b> |                  |                |
| <b>Expenditure Item</b>                               | <b>Total Exp</b> | <b>Per Day</b> |
|   | <b>\$</b>        | <b>\$</b>      |
| <b>Accommodation</b>                                  | 111,091          | 27,773         |
| <b>Entertainment</b>                                  | 13,486           | 3,372          |
| <b>Food &amp; Beverage</b>                            | 153,751          | 38,438         |
| <b>Souvenirs</b>                                      | 17,577           | 4,384          |
| <b>Local Transport</b>                                | 18,711           | 4,678          |
| <b>Total</b>  | 314,617          | 78,655         |

Figures in Table 5 have been rounded to the nearest dollar.

In terms of total primary expenditure approximately \$314,617 was spent by visitors at the NCUSA Games. These dollars, injected into the Lismore community, provided a "boost" to the economy, even after consideration of outgoing costs. Food/beverage attracted the greater amount of spending with a total of \$153,761 and \$38,348 per day. A total amount of \$111,091 was spent on accommodation with \$27,773 per day.

A 1992 study of the First Western Australian State Masters Games with approximately 786 competitors was held in the local town of Albany. McCann and Thompson (1992) found that visitor expenditure at the Albany Games was about \$54,450. On a local note, at a one day cricket match, West Indies versus New South Wales, held in Lismore, 1992 (Breen, 1993) which attracted about 2500 visitors to the LCC area, visitor expenditure was \$57,718. The size, location and demographic profiles of participants/visitors seems to have a significant impact on total visitor expenditure.

### **Direct Income from the event**

Event income data came from interviews with NCUSA officials and financial records of the NCUSA committee. Income was divided into two categories based on the location of the source of funds, that is local or non-local. Non-local income was that sourced from outside the local area and treated as 'new' funds.

NB: Where only total amounts were known, this was divided by 1600 (total number at the games) and multiplied by 250 ( number of local participants ) to obtain a local content. Table 6 provides a summary of the games event income.

| <b>Table 6<br/>Summary of NCUSA Games Event Income</b> |                     |                     |                              |                                 |
|--|---------------------|---------------------|------------------------------|---------------------------------|
| <b>Item</b>  | <b>Total<br/>\$</b> | <b>Local<br/>\$</b> | <b>Non-<br/>Local<br/>\$</b> | <b>Non-local<br/>sub totals</b> |
| <b>1) AUSF Cross Country</b>                           | 1,550               |                     | 1,550                        |                                 |
| <b>2) NCUSA Registration</b>                           | 33,757              | 6,250               | 27,507                       |                                 |
| <b>3) Good faith fees</b>                              | 12,650              | 1,975               | 10,675                       |                                 |
| • NCUSA  |                     |                     |                              |                                 |
| • AUSF   | 680                 |                     | 680                          |                                 |
| <b>4) Sponsorship (cash &amp; in-kind support)</b>     | 172,856             | 45,100              | 127,756                      | \$168,168                       |
| <b>5) Social</b>                                       | 37,517              | 5,850               | 31,667                       |                                 |
| <b>6) Merchandise</b>                                  | 13,677              | 2,125               | 11,552                       |                                 |
| <b>7) Catering</b>                                     | 28,120              | 4,375               | 23,745                       |                                 |
| <b>8) Accommodation</b>                                | 98,427              |                     | 98,427                       | \$165,391                       |
| <b>Total</b>   | <b>\$399,234</b>    | <b>\$65,675</b>     |                              | <b>\$333,559</b>                |

While the total income resulting from the NCUSA Games was \$399,234, the incremental or 'new' income to the Lismore City Council area was \$333,559 or 83.5% of the total. These funds would not have been generated if not for the NCUSA Games.

NB : Caution needs to be exercised where there is a potential to double count, which could lead to significant over estimations of the benefits of a local event (Simmons and Urquhart, 1994). Items 1 - 4 (inclusive) are income generated from registration fees and sponsorship. Items 5 - 8 are income

generated from social events, merchandise, catering and accommodation (these have already been accounted for in total primary visitor expenditure).

The total primary visitor expenditure was \$314,617 (Table 5). Given that \$165,391 was spent at the university on social, merchandise, catering and accommodation as seen in Table 6, it is assumed that the balance of almost \$150,000 was spent with local businesses in the LCC area. For example, a five night social program was organised at the University and six local hotels. There was obviously a benefit in terms of dollar amounts in having the extra patronage. These same businesses would also have incurred some additional costs such as cleaning, supervision, staffing, alcohol supplies and payments to major breweries. However, the extra cost in staffing may have created extra employment for casual staff.

#### **Primary Non-Local Expenditure Within The LCC Area.**

The total direct or primary non-local expenditure within the Lismore City Council area consisting of event related income generated from sponsorship, registration fees and total visitor expenditure (see Tables 5 & 6) was estimated to be  $\$168,168 + \$314,617 = \$482,785$ .

#### **Direct Expenses from the Event**

The NCUSA Game's event costs were compiled from interviews with NCUSA officials, financial records of the NCUSA committee and Lismore City Council staff. A nominal labour cost of \$600 was estimated by the Lismore City Council for sports ground maintenance over and above usual weekly maintenance expenses. As well, there was an estimated \$5000 nominal cost transfer as a contribution to overheads for lights, venue and facilities hire.

Expenses were divided into two categories based on the location of where the funds were to be paid, that is local or non-local. Non-local expenses were those payments to businesses and suppliers outside the local Lismore City Council area. Payments to local businesses were funds remaining in the local economy, to be reinvested.

| <b>Item</b>                     | <b>Total<br/>\$</b> | <b>Local<br/>\$</b> | <b>Non-Local<br/>\$</b> |
|---------------------------------|---------------------|---------------------|-------------------------|
| <b>Administration</b>           | 49,593              | 42,909              | 6,684                   |
| <b>Event</b>                    | 51,486              | 27,993              | 23,493                  |
| <b>Social</b>                   | 39,567              | 13,463              | 26,104                  |
| <b>Merchandise</b>              | 7,701               | 812                 | 6,889                   |
| <b>Catering</b>                 | 18,825              | 18,825              | 0                       |
| <b>Accommodation</b>            | 70,039              | 48,388              | 21,651                  |
| <b>Transport &amp; Cleaning</b> | 9,375               | 4,130               | 5,245                   |
| <b>Sponsorship</b>              | 8,732               | 8,732               | 0                       |
| <b>L.C.C. overheads</b>         | 5,600               | 5,600               | 0                       |
| <b>Total</b>                    | <b>\$260,910</b>    | <b>\$170,850</b>    | <b>\$90,066</b>         |

As seen in Table 7, while the total expenses of the NCUSA Games event were \$260,910, only \$90,066 was paid to suppliers and businesses outside the local Lismore City Council area. This outflow of funds is sometimes called leakage.

The bulk of the expenses \$170,850 remained in the Lismore area to be re-used by local businesses.

### **Direct Net Income from the Event for the Local Area**

The total direct or primary income for the local area was estimated to be \$482,785. The expenses leaving the local area were \$90,066. Deducting these expenses from the non-local income leaves \$392,719. Thus, the direct net income from the NCUSA Games retained in the LCC area was \$392,719.

By dividing the direct net income (\$392,719) by the mean number of nights (4.13) times the number of visitors (1350), the net value per person per day to Lismore from the NCUSA Games was \$70.44. Although visitor spending was recorded as \$58.24 per person per day, adding the value of sponsorship and the local retention of direct spending, income generated for the LCC by 1350 visitors was \$70.44 each. Thus, the direct expenditure multiplier for this event was 1: 1.2, that is for every dollar spent by visitors, another 20c was generated in income for the LCC area.

No further implications should be drawn from this multiplier estimation as indirect and induced economic impact assessments were outside the scope of this research.

### **Other Benefits and Costs**

There are a number of indirect and long-term benefits and costs that are difficult to measure but still important to consider. These have been summarised in Table 8 below but explained in more detail in Appendix B.

| <b>Table 8</b>                             |                                   |
|--|-----------------------------------|
| <b>Summary of other Benefits and Costs</b> |                                   |
| <b>Other Costs</b>                         | <b>Other Benefits</b>             |
| * 228 minor injuries                       | * 2-way radio training            |
| * opportunity costs (police and LCC)       | * Red Cross unit established      |
|  | * volunteers assistance           |
|  | * free use of venue               |
| <b>Indirect costs</b>                      | <b>Indirect Benefits</b>          |
| *\$1113 property damage                    | * Community co-operation          |
| *"import" content of goods used            | * local sports clubs fund-raising |

## CONCLUSION

Results showed that the total direct or primary income for the local area was estimated to be \$482,785. Expenses paid to non-local suppliers were \$90,066. This left \$392,719 as direct net income from the event, which stayed in the LCC area. The findings supported the hypothesis that revenue would be retained in the LCC area from the staging of the Games.

This study has also identified a number of indirect costs and benefits, such as damage and volunteerism. Because it was a local event there was no effect on infrastructure, so that the games used existing capacity more efficiently and avoided opportunity costs and displacement effects. In addition, there was a clear value to the community through the cost - free provision of volunteer labour.

These two factors are clearly a feature of local "special events" whose nature and impact require further investigation.

The generalisability of the results is unknown. Many local events are unique in their format and composition depending on the character of the local community. The opportunity for visitors to spend can be relatively limited. The NCUSA Games format is repeated every year at a different venue and the participants composition is almost the same, young university students. The factor which separates/individualises each Games, is the local community.

A local organising committee working with the host community can ensure that a significant proportion of the direct visitor spending can remain in the local region. Through supporting local industries and encouraging participation within community sporting and volunteer groups, a local special event can generate value to the hosts, not just the visitors or the

tourism industry. This enhancement of the host population's way of life, economy and environment is possibly the most significant difference between local special events and large scale events held in capital cities.

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## **Appendix A**

### **Study Terminology**

The terms used in this study are defined as follows:

- \* **Visitors** were all people, competitors, supporters and officials attending the NCUSA Games living outside the Lismore City Council area;
- \* **Expenditure** refers to the collection of expenses during the NCUSA Games from visitors in the categories of accommodation, food and beverage, local transport, entertainment and personal services and pleasure shopping;
- \* **Expenditure Diary** is the systematic record of a persons' expenditure over a given period of time (Pearce, 1988);

- \* **Expenditure recall** is the collection of expenditure data remembered over a given time, in an exit interview;
- \* **Direct economic impact** is the direct effect of additional economic activity created by the event. It is seen as the injection of 'new' money into the local economy from external sources such as visitors and sponsors (McCann and Thompson, 1992);
- **Indirect economic impact** is the additional indirect effect of extra activity created by the event, as the direct economic impacts spread into the local area or are transferred out of the region. Payments to local suppliers keep funds within the local area, while payments to outside suppliers (leakages), are lost to the local area (Bull, 1991).

## **Appendix B**

### **Other Costs**

- **First Aid** - Of the 228 injuries sustained at the games, approximately 30 used the local hospital. The cost of this was borne by the National Health Care System, Medicare.
- **Police Duty** - According to media reports there were no official police complaints concerning the NCUSA Games visitors to Lismore. Therefore, it can be assumed that the games caused no additional policing costs.
- **Cleaning/Security** - Costs for cleaning, garbage removal and security were accounted for as indirect event expenses. However, some of the cleaning was performed by LCC staff at the grounds in the LCC area, even though

garbage was collected by university staff each afternoon. Although \$600 was recorded as LCC overheads (see Table 6), there could have been an opportunity cost incurred where the cleaning team from the LCC may have been used for another purpose.

### **Indirect Costs**

Indirect costs associated with local events such as the games are often difficult to assess. In the case of the NCUSA Games these costs appear to be minimal. This included damage to university property of \$1113 which was deducted from the visiting universities' accommodation bond. There was no reported damage in the LCC area.

No attempt was made to ascertain the "import content" of the goods and services supplied by local LCC area businesses. It is very likely that a significant portion of these goods and services used raw materials from, or were manufactured outside, the LCC area.

### **Other Benefits**

- **Two -Way Radio Training** - Two way radio training was provided for volunteer helpers at the Games. Volunteers have gained specific skills in two way radio operations which they previously did not have. The university now has a well trained team that may be utilised for future events.
- **Australian Red Cross** - A volunteer aid service corps with 50 trained senior first aid volunteers was formed at Southern Cross, as a result of the

Games. This service was established to provide first aid at the Games and will continue operating in the LCC area in the future. The 63 volunteers provided 2000 voluntary work hours over the 5 days of the Games. These volunteers now have a Red Cross First Aid qualification and gained valuable experience from their involvement with the unit during the Games.

- **Local Council** - Lismore City Council provided the sporting venues/grounds within their control, free of charge to the NCUSA Games. This is typical of local special events (Frisby and Getz, 1989). Although \$5000 was accounted for as a contribution to general overheads (see Table 6), there could well have been an opportunity cost to the community if another organisation wanted to hire and pay for one of these venues during the event. However, as the games were held midweek and during school holidays, this was unlikely.

- **Volunteers** - The assistance of volunteers was a crucial and effective element in the running of the Games. Their co-operation and participation in the administration, sponsorship and catering reflected a spirit of goodwill and contributed value to the local community. Their effort was an addition to the local community, a net benefit which would not have occurred but for the staging of the Games. It could be reasonably assumed that had the Games been a "mega" event, then volunteers may well have wanted financial rewards for their time. Since volunteers used their leisure time for assisting at the Games, the opportunity cost would have been the value of alternative uses of such time, which is generally held in cost-benefit studies to be lower than the value of work time. It is possible that a significant difference

between smaller local special events and large "mega" events lies in the contribution of value made by volunteers.

### **Indirect benefits**

- **Community Sporting Organisations** - Community sporting clubs catered for participants with food stalls at their supporting venues.
- **Community Co-Operation** - Community co-operation took the form of voluntary help in staging the games in areas of administration, umpiring, match support and first aid in addition to sponsorship and supply of goods. NCUSA Games President, Ron Leahy, said that the difference between these Games and others that he had been involved with was that, "Southern Cross University had an entire town behind it", (Northern Star 1995, July 3, p.3).